

## ABSTRACT

A tomographic image and a tissue characteristic image that are in conformity with each other in terms of time-phase and positional relationships can be displayed superimposedly, thereby providing an excellent ultrasonic diagnostic apparatus that enables an easy and detailed observation of a relationship between a structure and a characteristic of a subject tissue. During an operation of ultrasonic wave transmission/reception (in a live mode), a control part (100) allows a tomographic image to be renewed continuously, displayed on a monitor (107), and stored in a tomographic image memory (110), while allowing an elastic modulus image as a tissue characteristic image to be renewed per heartbeat, displayed on the monitor, and stored in an elastic-modulus-image memory (111) as a tissue characteristic image memory. During a suspension of ultrasonic wave transmission/reception (in a cine mode), the control part (100) allows the elastic modulus image to be read out from the elastic-modulus-image memory and the tomographic image that is in synchronization with the elastic modulus image to be read out from the tomographic image memory, and allows these images to be displayed on the monitor.